

WHAT IS CLAIMED IS:

1. A cytotoxic reagent comprising an antibody and a moiety having ribonucleolytic activity derived from a non-human ribonuclease.
2. A cytotoxic reagent comprising an internalizing antibody and a moiety having ribonucleolytic activity, wherein said internalizing antibody is directed against a lineage-dependent antigen or against an antigen associated with cancer cells.
3. The cytotoxic reagent of claim 2 wherein the internalizing antibody is a monoclonal antibody.
4. The cytotoxic reagent of claim 3 wherein the monoclonal antibody is humanized or human.
5. The cytotoxic reagent of claim 4 wherein the antibody is a single chain antibody.
6. The cytotoxic reagent of claim 5 wherein said internalizing antibody is directed against an antigen selected from the group consisting of:
- (a) B-cell antigens;
 - (b) T-cell antigens;
 - (c) Plasma cell antigens;
 - (d) HLA-DR lineage antigens;
 - (e) MUC1 antigens;
 - (f) EGP-1 antigens;
 - (g) EGP-2 antigens; and

(h) placental alkaline phosphatase antigen.

7. The cytotoxic reagent of claim 2 wherein said internalizing antibody is directed against a target antigen associated with a B- or T-cell lymphoma.

8. The cytotoxic reagent of claim 7 wherein said antigen is an antigen selected from the group consisting of CD19, CD22, CD40, MUC1, IL-15, HLA-DR, EGP-1, EGP-2, and IL-15.

9. The cytotoxic reagent of claim 8 wherein said antigen is HLA-DR.

10. The cytotoxic reagent of claim 2 wherein the internalizing antibody is LL1.

11. The cytotoxic reagent of claim 8 wherein said antigen is CD22.

12. The cytotoxic reagent of claim 11 wherein the internalizing antibody is LL2.

13. The cytotoxic reagent of claim 8 wherein said antigen is MUC1.

14. The cytotoxic reagent of claim 13 wherein the internalizing antibody is PAM4.

15. The cytotoxic reagent of claim 8 wherein said antigen is EGP-1.

TOCOT "E" 1000000

Subar
+
add

16. The cytotoxic reagent of claim 15 wherein the internalizing antibody is RS7.
17. The cytotoxic reagent of claim 8 wherein said antigen is EGP-2.
18. The cytotoxic reagent of claim 17 wherein the internalizing antibody is RS11 or 17-1A.
19. The cytotoxic reagent of claim 2 wherein said internalizing antibody is a lineage-dependent antibody of a B-cell.
20. The cytotoxic reagent of claim 2 wherein said internalizing antibody is a lineage-dependent antibody of a T-cell.
21. The cytotoxic reagent of claim 2 wherein said internalizing antibody is a lineage-dependent antibody of a plasma cell.
22. The cytotoxic reagent of claim 2 wherein said antigen is CD22 or CD74.
23. The cytotoxic reagent of claim 2 wherein the internalizing antibody is LL1 or LL2.
24. A pharmaceutical composition comprising a cytotoxic reagent of claim 2 and a pharmaceutically acceptable carrier.
25. A method of killing cancer cells comprising administering to a subject in need thereof a pharmaceutical composition of claim 24.